

Ecology – standing advice for householder and small developments.

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LCC Ecology Service has the attached standing advice for minor and householder development.

LCC will respond with specific tailored advice to the following types of development:

- All **major application consultations**. This includes assessment of ecology surveys, protected species surveys, BNG metrics and improvement plans.
- All **Hedgerow Regulations consultations**. This will include a desk assessment, but LCC will not be able to carry out field surveys.
- All applications affecting **Local Wildlife Sites** (notified, candidate and potential LWS), regardless of size.
- **Large rural buildings with high bat potential** (such as halls or 'mansions' within parkland, etc.)

We will defer to Natural England regarding impacts on **Sites of Special Scientific Interest** and other national/international designated sites (SSSIs, NNRs, SPAs and SACs) arising from planning applications. Some general notes and guidance on **Biodiversity Net-gain** are below, with some more detailed guidance on specific scenarios.

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GENERAL NOTES:

Ecology Alert layers

The Leicestershire and Rutland Environmental Records Centre (LRERC) has provided these to all LPAs to assist with scoping of ecology surveys. These cover:

- locally designated sites
- known bat roosts
- known badger setts
- watercourse/water bodies with recent water vole records
- known and probable great crested newt ponds
- Swift Alert Areas

They are not comprehensive – surveys may still be needed even if there isn't a protected species or habitat shown on the Alert layer. Before using these to trigger surveys or consultations, the general advice attached to each polygon on the Alert layer should be referred to.

Contact LRERC for advice on use and access to the layer. (lreirc@leics.gov.uk)

Consultants

Surveys should be done by appropriately licensed and experienced consultants, and we recommend they are also members of CIEEM. Licences are issued by Natural England and cover surveys (CL17 and CL18) and mitigation (A13 and CL21)

A list of consultants is attached, or search CIEEM's register. <https://cieem.net/i-need/finding-a-consultant/>

Pre-determination surveys

Protected species surveys are needed pre-determination, in line with paragraph 99 of ODPM 06/2005: *Government Circular: Biodiversity and Geological Conservation – Statutory Obligations and their impact within the Planning system.*

This specifically prevents ecology survey as a planning condition.

<https://www.gov.uk/government/publications/biodiversity-and-geological-conservation-circular-06-2005>

Where to send ecology reports for minor and householder developments

Ecology survey reports should be sent to LRERC (lreirc@leics.gov.uk) in order that data can be extracted and added to the County database.

LCC Ecology guidance notes

Guidance on the following is available here: <https://www.leicestershire.gov.uk/environment-and-planning/planning/leicestershire-and-rutland-environment-records-centre-lreirc>

- Local validation criteria: biodiversity
- Bats in buildings
- Bats and lighting
- Great Crested Newt surveys
- Habitat surveys
- Surveys and mitigation for invertebrates
- Bird surveys
- Barn Owls protocol
- Bird boxes

- Swifts – advice to planners and developers
- Ecology information to support a planning application
- Leicester, Leicestershire and Rutland Biodiversity Action Plan
- Guidelines for the selections of Local Wildlife Sites

When is a BNG assessment needed?

BNG is expected to become mandatory in late 2023 - these notes are for interim use only.

Policies in the NPPF (and some local policies) require developments to demonstrate ‘measurable net-gains’.

‘174. Planning policies and decisions should contribute to and enhance the natural and local environment by: [. . .] d) minimising impacts on and providing net gains for biodiversity, including by establishing coherent ecological networks that are more resilient to current and future pressures’

‘179 To protect and enhance biodiversity and geodiversity, plans should: [. . .] b) promote the conservation, restoration and enhancement of priority habitats, ecological networks and the protection and recovery of priority species; and identify and pursue opportunities for securing measurable net gains for biodiversity.’

‘180 When determining planning applications, local planning authorities should apply the following principles:[. . .] d) [. . .] opportunities to improve biodiversity in and around developments should be integrated as part of their design, especially where this can secure measurable net gains for biodiversity or enhance public access to nature where this is appropriate.’

Householders do not need to provide a BNG assessment. We advise that very small developments (e.g. below 50 sqm. of vegetation on site) or sites which are not vegetated do not need to be supported by a BNG assessment.

We advise that all other developments should provide a BNG assessment with their planning application, at the discretion of the planning authority. The results of this should then be subject to a planning condition/obligation.

LCC Ecology doesn’t have the capacity to scrutinise minor development BNG metrics and therefore the consultant ecologist’s advice should be accepted.

A BNG assessment should use the latest DEFRA metric, and will require a baseline habitat survey. Any net-losses should be addressed through on-site enhancements, as a priority, then through offsite enhancements on the applicant’s own land or third-party land, and should be secured at the planning application stage through planning conditions or agreements.

Biodiversity Net-gain metric

Further information on this and a downloadable metric is at

<http://nepubprod.appspot.com/publication/6049804846366720>

Securing off-site BNG through planning obligations.

LCC Ecology doesn’t have the expertise to advise on the wording to use in a S106 agreement, which will be between the developer and LPA (not Leicestershire County Council). We understand that any off-site net-gains will need to be included in a S106, which may involve a third party.

SPECIFIC TYPES OF PLANNING APPLICATION

A: Householders and Barn Conversions - Bats

For buildings that meet the following criteria, a bat survey and mitigation plan will be required. Most buildings on edge of settlements or adjacent to open spaces will fall into these criteria.

Further information is in NE's standing advice:

<https://www.gov.uk/guidance/bats-advice-for-making-planning-decisions#when-to-ask-for-a-survey>

- has little or no disturbance from artificial lighting
- is close to woodland or water
- has uneven roof tiles and large roof timbers
- has cracks, crevices and small openings
- has a roof that warms in the sun with a large roof space for flying
- has hanging tiles or timber cladding on south-facing walls and has not been used for several years

A bat survey involves a preliminary roost building inspection, which can be done at any time of year but requires full access to buildings. Depending on the results, one or more bat emergence or re-entry surveys will be needed, in accordance with national guidelines <https://www.bats.org.uk/resources/guidance-for-professionals/bat-surveys-for-professional-ecologists-good-practice-guidelines-3rd-edition>

These can only take place in the active bat season, as set out in the guidelines. In general, the optimum is between May and August.

Any mitigation recommendations made by an ecology consultant should be referred to in planning condition.

See LCC guidance <https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2021/10/5/LRERC-Bat-Protocol.pdf>

B: Barn Conversions – Barn Owls

All Barn conversions and demolitions, including modern structures, should have pre-application barn owl surveys. Mitigation plans should be referred to in condition. See LCC's guidance

https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2021/12/17/LRERC-Barn-Owl-Protocol_0.pdf

C: Great Crested Newts – minor developments with ponds within 100m

Refer to District-level licensing scheme <https://www.gov.uk/government/publications/great-crested-newts-district-level-licensing-schemes>

If the applicant elects to join this, it will remove the need for survey and on-site mitigation. An IACPC (Impact Assessment and Conservation Payment Certificate) counter-signed by NE must be submitted pre-application as proof that the applicant has entered the scheme.

Alternatively, the applicant must provide pre-application surveys of ponds within 100m and (if appropriate) provide a mitigation plan. Surveys can be done in March – June. Mitigation plans should be referred to in planning condition.

See LCC guidance <https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2021/12/10/LRERC-Great-Crested-Newt-survey-protocol.pdf>

D: Single wind turbines >250MW

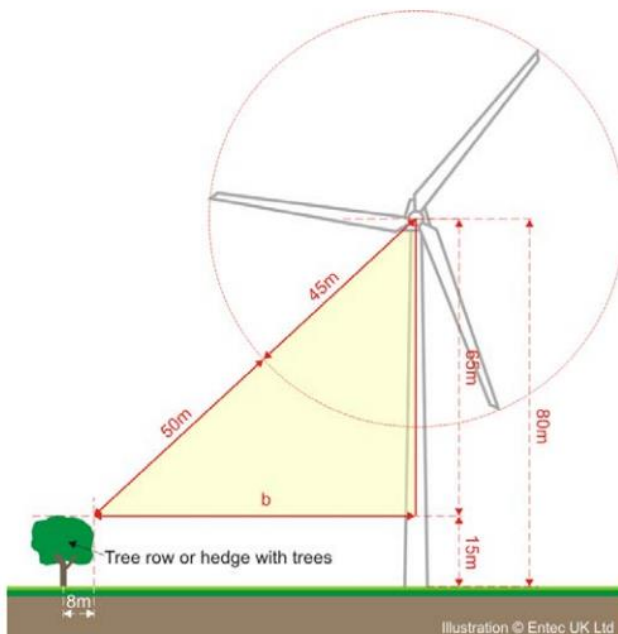
Refer to formula and diagram, copied below, in Natural England’s technical Advice Note TIN051 ‘Bats and Onshore Wind Turbines’. <http://publications.naturalengland.org.uk/publication/35010>

If the turbine is sited so that blades are over 50m from a feature likely to be used by foraging or commuting bats – such as hedge, canal, watercourse, edge of woodland – there will be no need for a survey.

This formula calculates – **double click the table to call up a spreadsheet, then enter the 3 values in the spreadsheet :**

	enter values here
blade length (m)	0
Hub height (m)	0
Feature height (m) - e.g. hedge, watercourse, etc.	0
Minimum Distance of Turbine base from feature	50

$$b = \sqrt{(50 + bh)^2 - (hh - fh)^2}$$



where: bl = blade length, hh = hub height , fh = feature height (all in metres). For the example above, b = 69.3 m.

It applies to bats and their activity in the wider countryside and does not specifically address turbines proposed near protected sites, particularly those designated due to important bat populations. The only SSSI in Leicestershire and Rutland notified for these in the Kilby-Foxton canal.

E: Developments in Swift Alert Areas

Surveys for swifts are not needed.

Swift boxes/bricks should be required by conditions if the replacement or converted buildings are suitable. They should be at least 2-storey, with a blank area of wall under eaves or gables. Swift boxes should be in groups of three, and we recommend one group per residential unit, or equivalent for commercial developments.

See Swift Partnership guidance

<https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2018/4/16/swifts-advice-to-planners-and-developers.pdf>

F: New buildings in back gardens

There is no need for a specific ecology survey, but the LPA may wish to apply Biodiversity net-gain to the proposal (it will become mandatory in later 2023).

A Note to Applicant regarding badgers and nesting birds may be applied, as follows:

“Habitats on site are potentially suitable for nesting birds and badgers, both protected by law. A survey for these species is recommended before clearance of vegetation. If badger setts are present, specialist ecological advice and mitigation will be needed if works take place within 30m of a sett, and it may be necessary to apply for a licence from Natural England to disturb the sett. Vegetation clearance during the bird-nesting season (March – July inclusive) should be avoided unless it is within 24 hours of a negative bird-nesting survey from an appropriately qualified ecologist.”

G: New field entrances and minor applications requiring removal of hedgerows

(NOTE: this is separate to Hedgerow Regulations approval applications, which LCC will assess individually when consulted)

There is no need for an ecology survey unless over 20m of native species hedgerow adjacent to countryside is being removed. Surveys are not needed for removal of non-native hedges or those forming a residential curtilage or not adjacent to open countryside.

A Note to Applicant regarding badgers and nesting birds may be applied, as above.

Removal of over 20m of hedge should trigger a pre-determination hedgerow survey. It is helpful to use the same survey standards as for Hedgerow Regulations applications.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/438652/hedgerow_guide_part_1.pdf

If the hedgerow is classed as ‘Important’ for wildlife and landscape when applying these survey standards, it should not be removed.

Compensatory planting for loss of a native species hedgerow should be a planning condition. For suitable species, see below.

H: landscape plans for small developments – species-mixes

Suitable trees for **woodlands and tree** planting in natural open space or adjacent to open countryside are:

Oak (*Quercus robur*)
Aspen (*Populus tremula*)
Field Maple (*Acer campestre*)
Birch (*Betula pendula*)
Crab apple (*Malus sylvestris*)
Wild Cherry (*Prunus avium*)
Scots Pine (*Pinus sylvestris*) – small amounts
Rowan (*Sorbus aucuparia*)

Woodland shrubs can be from the hedge list below.

In wet areas and waterside, these species are recommended:

Crack Willow (*Salix x fragilis*)
White Willow (*Salix alba*)
Alder (*Alnus glutinosa*)
Osier (*Salix viminalis*)
Grey Sallow (*Salix cinerea*)
Goat Willow (*Salix caprea*)

Tree and shrub species to avoid in natural situations:

- These species are often in planting lists but are not native in our area; we recommend replacement with a locally native species: Beech, Hornbeam, Bird Cherry, Yew, Horse Chestnut, Bay Willow, Weeping Willow, Sweet Chestnut, Common Lime, Balsam Poplar, Hybrid Black Poplar, Sycamore, Norway Maple, Sea Buckthorn.
- Wayfaring tree (*Viburnum lantana*) and Whitebeam (*Sorbus aria*) are only native in limestone areas (parts of Rutland and the eastern edge of Melton).
- These species are native, but rare and of conservation significance in our area: Small-leaved Lime (*Tilia cordata*), Wild Service Tree (*Sorbus torminalis*), Alder Buckthorn (*Frangula alnus*), Sessile Oak (*Quercus petraea*), native Black Poplar (*Populus nigra*). We recommend they are avoided because of the risk of introducing pathogens or non-native genetic material into our local stock.

New native hedges

80% Hawthorn (*Crataegus monogyna*), plus any one or more of the following:

Field Maple (*Acer campestre*)

Hazel (*Corylus avellana*)

Dogwood (*Cornus sanguinea*)

Blackthorn (*Prunus spinosa*)

Dog Rose (*Rosa canina*)

Holly (*Ilex aquifolium*)

Wild Privet *Ligustrum vulgare*

Buckthorn *Rhamnus catharticus*

Gapping up hedges: Hawthorn (*Crataegus monogyna*) is recommended

Hedgerow standards: English Oak (*Quercus robur*) and Crab Apple (*Malus sylvestris*)

Suitable **wildflower grassland** species-mixes are for neutral, clay or loamy soils and should include Yellow Rattle (*Rhinanthus minor*). They should have UK provenance. These mixes, or similar, are acceptable:

<https://wildseed.co.uk/product-category/mixtures/complete-mixtures/> (Emorsgate EM2, EM4, EM5)

<https://britishwildflowermeadowseeds.co.uk/collections/neutral-soils>

<https://www.wildflower.co.uk/products/wildflower-seed-mixtures/all-wildflower-seed-mixtures/lw4-loam-alluvial-soils-100.html>

<https://germinalamenity.com/re1-traditional-hay-meadow-mg5-grassland>

Wildflower meadows should be created on **clean low-nutrient subsoils** - fertiliser must not be applied.

To maintain species diversity, meadows should be cut in late summer and the **cuttings MUST be removed** within a week. Tidying-up cuts are OK in autumn and early spring, but wildflower meadows should not be mown between mid-April and late-July.

I: landscape plans for small developments – buffer zones to retained or adjacent habitats

This advice applies to adjacent off-site habitats as well as those within the site.

Veteran and near-veteran trees.

Many of these are designated as Local Wildlife sites. The criteria is for trees over 3.77m girth, or 3.0 m for Ash, with standing dead wood habitats. These are irreplaceable habitats.

Any tree classed as veteran in an arboricultural survey, designated as a Wildlife Site or meeting the above criteria should be retained in situ.

In accordance with Natural England's advice, we recommend a buffer zone of 15x the tree's diameter or 5m from the tree's canopy, whichever is larger, to protect the root zone.

<https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

Mature woodland and plantation

In accordance with Natural England's advice for ancient woodlands, we recommend a buffer zone of 15m to protect the root zone. Because semi-natural ancient woodlands are relatively scarce in Leicestershire and Rutland, the value of other mature woodland is high and should be regarded as irreplaceable.

<https://www.gov.uk/guidance/ancient-woodland-ancient-trees-and-veteran-trees-advice-for-making-planning-decisions>

Hedgerows

All semi-natural boundary hedges to open spaces and open countryside should be retained.

It is acceptable to have occasional breaks in retained hedges for pedestrian and cycle routes and for minor roads through the development site.

All retained hedges should have a buffer zone of 5-10m alongside, managed as natural or informal open space.

Rationale for retaining buffer zones alongside hedges

- If retained hedges form the boundaries to gardens and other private land, they will not be managed after development as single units. Piecemeal management by individual landowners is likely to lead to the removal of native species and replacement with 'Leylandii' or other non-native hedging shrub, or close-board fencing. This will impair the hedgerow's value as a linear wildlife corridor and habitat, as well as harming landscape and appearance
- If hedges are retained as the boundaries to gardens, rubbish may be dumped at the base of the hedge, and wildlife using the hedge as a wildlife corridor (such as badger, bats and some species of bird) may be disturbed if the hedge forms a garden boundary.

- Buffer zones are needed to allow proper management of the hedge, through periodic cutting and laying. Vehicle access alongside will be needed.
- Buffer zones allow for some outgrowth in between cutting, reducing the number of times a hedge needs to be cut.
- Buffer zones between hedges and paths are needed to help visibility along the path, and to prevent outgrowth over the path.

Watercourses

Watercourses are important wildlife corridors, however small. Larger watercourses and canals have regional and countywide strategic value.

Buffer zones are measured from the top of the bank not the water's edge and must be natural vegetation (long grass, marsh, tall herbs or scrub mosaics).

Buffer zones help to protect the wildlife corridor, including its use by protected species such as Kingfisher, Water Vole and Otter.

- 10m buffer of natural vegetation alongside small streams and ditches
- 20m buffer of natural vegetation alongside canals, small rivers and large streams
- 50m alongside large rivers (Trent, Soar and Wreake)

Buffer zones can include informal unsurfaced desire lines. Formal surfaced paths/cycleways should be set at least 10m away from the top of the bank and are in addition to the recommended buffer width. (e.g. a 4m wide cycle/footpath can be sited 10m from a small river, but should have a further 10m of natural vegetation on the opposite side.)

Gardens should not extend down to watercourses or canals.

Hay meadows and wildflower grasslands.

We recommend at least 1m buffer zone of mown amenity grassland along edges next to pathways or roads, to prevent long grass flopping over.

J: Impacts of lighting on bats and birds

If flood or security lighting is proposed close to features that could be used by foraging bats or by birds, the lighting must be designed to avoid light spillage onto the habitat. We recommend this is **less than 1 lux**. To determine this, an **isolux plot** is needed. If this cannot be achieved, a bat survey may be required.

Habitats include woodland edges, avenues of trees, young plantations, scrub, watercourses, canals, wetlands and ponds, wildflower grassland, areas of long grass, hedgerow and tree-belts.

See LCC Advice note:

https://www.leicestershire.gov.uk/sites/default/files/field/pdf/2016/8/22/LRERC_Bats_lighting.pdf

Lighting should never be directed at an entrance to a bat roost or on a bird-box.

Red street lighting can be used adjacent to wildlife corridors or bat foraging routes.

<https://www.electronicweekly.com/news/products/led/red-led-streetlights-make-uk-road-bat-friendly-2019-09/>